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Total Number of Pages in This Submission

27

Application Number 10/691,480

Filing Date October 21, 2003

First Named Inventor Keeler, Sr.

Art Unit 1761

Examiner Name Jyoti Chawla

Attorney Docket Number 424532-00002

### ENCLOSURES (Check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
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Firm Name	Thompson Hine LLP, P.O. Box 8801, Dayton, Ohio 45401-8801		
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Date	December 20, 2007	Reg. No.	52,345

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PTO/SB/17 (10-07)

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Effective on 12/08/2004.  
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).**FEE TRANSMITTAL**  
**For FY 2008**☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 255.00

**Complete if Known**

Application Number	10/691,480
Filing Date	October 21, 2003
First Named Inventor	Keeler, Sr.
Examiner Name	Jyoti Chawla
Art Unit	1761
Attorney Docket No.	424532-00002

**METHOD OF PAYMENT** (check all that apply)☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_☒ Deposit Account Deposit Account Number: 20-0809 Deposit Account Name: \_\_\_\_\_

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☐ Charge fee(s) indicated below☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s)  
under 37 CFR 1.16 and 1.17☒ Credit any overpayments**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	310	155	510	255	210	105	
Design	210	105	100	50	130	65	
Plant	210	105	310	155	160	80	
Reissue	310	155	510	255	620	310	
Provisional	210	105	0	0	0	0	

**2. EXCESS CLAIM FEES****Fee Description**

Each claim over 20 (including Reissues)

Fee (\$)	Small Entity Fee (\$)
50	25

Each independent claim over 3 (including Reissues)

210	105
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Multiple dependent claims

370	185
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Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
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- 20 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
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- 3 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of independent claims paid for, if greater than 3.

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$260 (\$130 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
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- 100 = \_\_\_\_\_ / 50 = \_\_\_\_\_ (round up to a whole number) x \_\_\_\_\_ = \_\_\_\_\_

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Fees Paid (\$)

Other (e.g., late filing surcharge) Appeal Brief \$255

\$255.00

**SUBMITTED BY**

Signature		Registration No. 52,345 (Attorney/Agent)	Telephone 937-443-6812
Name (Print/Type)	Victor J. Wasylyna		Date December 20, 2007

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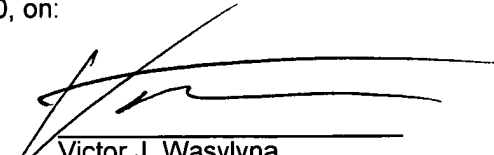
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PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

### Application of:

Applicant : Keeler, Sr.  
Serial No. : 10/691,480  
Filed : October 21, 2003  
Title : METHOD FOR PACKAGING CRABMEAT  
Docket : 424532-00002  
Examiner : Jyoti Chawla  
Art Unit : 1761

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### APPEAL BRIEF

This is an appeal from the rejections presented in the final Office action mailed on October 4, 2007 and maintained in the advisory action mailed on October 25, 2007. A timely notice of appeal was filed on October 26, 2007 and was received by the United States Patent and Trademark Office on October 29, 2007.

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REAL PARTY IN INTEREST:

Applicant, John Keeler, Sr., has assigned the present patent application to John Keeler & Co., Inc, doing business as Blue Star Food Products. A copy of the assignment document was recorded in the United States Patent and Trademark Office at Reel 014975, Frame 0066 on February 13, 2004. Therefore, John Keeler & Co., Inc. is the real party in interest.

RELATED APPEALS AND INTERFERENCES:

The inventor, assignee and undersigned attorney are not aware of any other appeals or interferences that directly affect or will be directly affected by, or are related to or have a bearing on, the Board's decision in this pending appeal.

U.S. Ser. No. 10/691,480  
Docket No. 424532-00002  
Appeal Brief

STATUS OF CLAIMS:

Claims 3-5, 7, 10, 12, 13, 15 and 18 stand rejected and are being appealed. Claims 1, 2, 6, 8, 9, 11, 14, 16 and 17 have been cancelled during prosecution.

STATUS OF AMENDMENTS:

An amendment after final was filed on October 5, 2007 presenting amendments to claim 18 subsequent to final rejection. As indicated in the advisory action mailed on October 25, 2007, the amendments to claim 18 have been entered.



SUMMARY OF CLAIMED SUBJECT MATTER:

Traditionally, crabmeat packaged in airtight containers has been sterilized or frozen. (P. 1, ll. 7-8.) However, the sterilization and freezing processes alter the texture, taste and fresh characteristics of the crabmeat. (P. 1, ll. 10-11.)

The claims of the present patent application are directed to crabmeat packaged in flexible pouches with a predetermined volume of ambient air and then subjected to a pasteurization process. (P. 4, ll. 12-16.) The pasteurization process kills certain bacteria but allows the crabmeat to retain many of its original qualities, such as appearance, taste, texture, moisture, color and smell. (P. 4, ll. 25-26.). The predetermined volume of ambient air in the package retards the growth of aerobic and anaerobic bacterial growth, but not to the point at which spoilage (i.e., aerobic bacterial growth) becomes undetectable. (P. 4, ll. 17-24.)

Independent claim 10 is directed to a packaged crabmeat product including a flexible pouch (p. 5, ll. 11-17), a volume of crabmeat placed into the flexible pouch (p. 5, ll. 11-12), and a volume of ambient air within the flexible pouch (p. 5, ll. 18-19), wherein the flexible pouch is sealed and pasteurized (p. 5, l. 10). The volume of ambient air in the flexible pouch provides an ambient air to crabmeat ratio of about 13 to 20 percent by volume such that anaerobic bacterial growth is prevented (p. 6, ll. 4-17).

Independent claim 18 is directed to a method for packaging crabmeat including the steps of providing a flexible pouch (p. 5, ll. 11-17), placing a volume of crabmeat into the flexible pouch (p. 5, ll. 11-12), controlling a volume of ambient air in the flexible pouch to obtain an ambient air to crabmeat ratio within the flexible pouch of about 13 to 20 percent by volume such that anaerobic bacterial growth within the flexible pouch is prevented (p. 6, ll. 4-17), wherein the controlling step is performed after the crabmeat has been placed in the flexible pouch, sealing the flexible pouch and, after the sealing step, pasteurizing the flexible pouch (p. 5, l. 10).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL:

(A) Claims 3-5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of (1) U.S. Patent No. 5,268,189 to Doerter (the “Doerter reference”), (2) Peterson, M. E., G. A. Pelroy, F. T. Poysky, R. N. Paranjpye, F. M. Dong, G. M. Pigott and M. W. Eklund. “Heat-Pasteurization Process for Inactivation of Nonproteolytic Types of *Clostridium botulinum* in Picked Dungeness Crabmeat.” *Journal of Food Protection* 60(8) (1997): 928-934 (the “Peterson et al. reference”), (3) U.S. Patent No. 2,546,428 to Byrd (the “Byrd reference”), (4) Air Liquide Canada, “Packaging and Preserving Fish and Sea Products” (Abstract Only) (the “Air Liquide reference”) and (5) U.S. Patent No. 4,840,805 to Sugisawa et al. (the “Sugisawa et al. reference”).

(B) Claims 3-5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of (1) U.S. Patent Pub. No. 2002/0061412 to Ueyama et al. (the “Ueyama et al. reference”), (2) the Peterson et al. reference, (3) the Air Liquide reference and (4) the Sugisawa et al. reference.

(C) Claims 3-5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of (1) GB 2,343,611 to Lett et al. (the “Lett et al. reference”), (2) the Peterson et al. reference, (3) the Air Liquide reference, (4) the Doerter reference and (5) the Sugisawa et al. reference.

(D) Claims 3-5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of (1) U.S. Patent No. 3,852,486 to Walker et al. (the “Walker et al. reference”), (2) the Ueyama et al. reference and (3) the Sugisawa et al. reference.

ARGUMENT:

**A. CLAIMS 3-5, 7, 10, 12, 13, 15 AND 18 ARE NOT OBVIOUS OVER THE COMBINATION OF THE DOERTER REFERENCE, THE PETERSON ET AL. REFERENCE, THE BYRD REFERENCE, THE AIR LIQUIDE REFERENCE AND THE SUGISAWA ET AL. REFERENCE**

1. Claims 10, 12, 13 and 15

Claims 10, 12, 13 and 15 are directed to a packaged crabmeat product wherein a volume of crabmeat and a volume of ambient air are sealed in a flexible pouch and pasteurized. Of particular significance, the packaged crabmeat product includes an ambient air to crabmeat ratio within the flexible pouch of about 13 to 20 percent by volume such that anaerobic bacterial growth is prevented.

Thus, the packaged crabmeat product of claims 10, 12, 13 and 15 provides a low cost means for obtaining a safer and more desirable product. Specifically, the use of ambient air reduces costs (ambient air is inexpensive if not free), while the pasteurization process destroys bacteria without destroying the quality of the crabmeat and the specific ambient air to crabmeat ratio retards the growth of aerobic and anaerobic bacteria, but not to the point at which spoilage becomes undetectable.

It is submitted that the Examiner's proposed combination of the Doerter, Peterson et al., Byrd, Air Liquide and Sugisawa et al. references fails to establish a prima facie case of obviousness in connection with claims 10, 12, 13 and 15. It is further submitted that the unexpected advantages of the packaged crabmeat product of claims 10, 12, 13 and 15 rebut the Examiner's assertion of obviousness.

The Doerter reference discloses a process for packing shellfish, such as crab, in a container. Specifically, the Doerter reference discloses a process including the steps of: (1) packing the shellfish in the container, (2) filling the container with a mixture of carrageenan and water such that "[t]he mixture fills the container and effectively forces any air from the container, leaving only shellfish and the carrageenan mixture," col. 3, ll. 8-10, (3) hermetically sealing the container, (4) sterilizing or pasteurizing the container and (5) cooling the container.

The Doerter reference does not disclose a packaged crabmeat product including an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Indeed, at p. 4, ll. 19-21 of the final Office action, the Examiner concedes that the Doerter, Peterson et al., Byrd and Air

Liquide references are “silent as to the specific volume of ambient air in the package to obtain the ambient air to crabmeat ratio within the package to about 13-20%.”

Furthermore, it is submitted that the Doerter reference teaches away from a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Specifically, the Doerter reference teaches using a mixture of carrageenan and water to “effectively [force] any air from the container, leaving only shellfish and the carrageenan mixture.” (Dorster, col. 3, ll. 8-10.) Therefore, the Doerter reference encourages the complete removal of air from the package, thereby suggesting that air is detrimental to the disclosed packing process.

In contrast, claims 10, 12, 13 and 15 expressly require ambient air within the packaged crabmeat product. Indeed, it is the ambient air, specifically the claimed ambient air to crabmeat ratio of about 13 to 20 percent by volume, that is believed to provide the packaged crabmeat product of claims 10, 12, 13 and 15 with the disclosed advantages.

Accordingly, it is submitted that the Doerter reference fails to teach a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. It is further submitted that the Doerter reference teaches away from the claimed packaged crabmeat product.

The Peterson et al. reference discloses the concept of pasteurizing flexible pouches packed with Dungeness crabmeat. Furthermore, the Peterson et al. reference concludes that pasteurization extends the shelf life of such flexible pouches by inactivating spores of *Clostridium botulinum* nonproteolytic types B, E and F, but not proteolytic strains of *C. botulinum*. However, as conceded by the Examiner (final Office action, p. 4, ll. 19-21), the Peterson et al. reference does not disclose a packaged crabmeat product including an ambient air to crabmeat ratio within the flexible pouch of about 13 to 20 percent by volume.

Accordingly, it is submitted that the Peterson et al. reference fails to teach a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume.

The Byrd reference discloses a method for packaging fresh shellfish in a container including the steps of: (1) packaging shellfish meat in the container, (2) sealing the container with a minimized amount of air therein, (3) heating the sealed container to 171 °F, (4) cooling the heated container and (5) refrigerating the container until consumed. Specifically, the Byrd

reference discloses that the containers packed with shellfish meat are “vacuumized by any known method, if possible, but, if not, are packed more tightly in order to reduce to the minimum undesired air space between the particles of crab meat.” (Byrd, col. 2, ll. 44-48.)

Thus, as conceded by the Examiner (final Office action, p. 4, ll. 19-21), the Byrd reference does not disclose a packaged crabmeat product including an ambient air to crabmeat ratio of about 13 to 20 percent by volume.

Furthermore, it is submitted that the Byrd reference teaches away from a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Specifically, the Byrd reference teaches minimizing the amount of air in the container by, for example, vacuumizing or tightly packing the crabmeat into the container. Therefore, like the Doerter reference, the Byrd reference suggests that air is detrimental to the packaged product and teaches creating the anaerobic environment that the claimed ambient air to crabmeat ratio of 13 to 20 percent by volume is intended to avoid.

Accordingly, it is submitted that the Byrd reference fails to teach a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. It is further submitted that the Byrd reference teaches away from the claimed packaged crabmeat product.

The Air Liquide reference discloses packaging “non-salted, smoked, filleted, eviscerated whole fish and fresh sea products” in gas-tight plastic wrapping or bulk plastic trays or containers. The packaging is subjected to a vacuum to remove all air and then a gaseous atmosphere, consisting of 60-80 percent by volume CO<sub>2</sub> and 20-40 percent by volume oxygen, is introduced to the packaging. However, as conceded by the Examiner (final Office action, p. 4, ll. 19-21), the Air Liquide reference does not disclose a packaged crabmeat product including an ambient air to crabmeat ratio of about 13 to 20 percent by volume.

Furthermore, the Air Liquide reference teaches away from a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Specifically, the Air Liquide reference teaches the use of a modified atmosphere that requires the removal of all air from the package before introducing a specific gaseous atmosphere. Indeed, the requirement of an ambient air to crabmeat ratio of about 13 to 20 percent by volume would compromise the modified atmosphere taught by the Air Liquide reference and would render the modified

atmosphere inadequate for its intended purpose.

Accordingly, it is submitted that the Air Liquide reference fails to teach a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. It is further submitted that the Air Liquide reference teaches away from the claimed packaged crabmeat product.

The Sugisawa et al. reference discloses a process for packaging fish that prevents the formation of drips on the fish. In particular, the process includes the steps of: (1) drying the fish, preferably to 55 to 75 percent by weight, (2) broiling the dried fish to a specific hardness, preferably 240 to 850 grams, (3) hermetically packaging the broiled fish in a container, and (4) heat sterilizing the packaged container. The hermetically packaging step is preferably a vacuum packaging process “so that the air content is 25% or less, preferably 15% or less, relative to total volume of air and the broiled fish in the container.” (Col. 3, ll. 9-12.) This type of disclosure suggests only that Sugisawa et al.’s patent attorney did not want to limit the invention to a true vacuum – not that some amount of air is advantageous. Further, the Sugisawa et al. reference notes that the vacuum packaging process improves the sterilization effect obtained during the heat sterilization step and prevents the flow of drips from the fish and the breaking of the fish meat during the heat sterilization step. (Col. 3, ll. 12-16.)

Thus, the Sugisawa et al. reference discloses packaging dried, broiled fish (not crabmeat), using a vacuum sealing process to remove as much air as possible (not to an ambient air to crabmeat ratio of about 13 to 20 percent by volume) and sterilizing (not pasteurizing) the sealed product.

The Sugisawa et al. reference does not disclose an ambient air to crabmeat ratio, let alone a ratio of ambient air to crabmeat having a lower limit and an upper limit, specifically 13 to 20 percent by volume. Rather, the Sugisawa et al. reference simply notes that the vacuum packaging process should reduce the air in the package to “25% or less, preferably 15% or less.” (Col. 3, l. 11 (emphasis added).) As such, the Sugisawa et al. reference does not teach, or even contemplate, requiring a minimum amount of ambient air within the package and, therefore, does not teach or suggest an ambient air to crabmeat ratio in the range of 13 to 20 percent by volume.

Furthermore, since the Sugisawa et al. reference only discloses using a heat sterilization step, the amount of air within the package has no effect on microbial growth within the package

– the product is steril. Indeed, there would be no need for an ambient air to crabmeat ratio of about 13 to 20 percent if the packaged crabmeat product of claims 10, 12, 13 and 15 was sterilized, rather than pasteurized.

Still furthermore, the Sugisawa et al. reference teaches away from a pasteurized crabmeat product packaged in a flexible pouch having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Specifically, the Sugisawa et al. reference only teaches packaging fish, specifically dried, broiled fish, and using heat sterilization, not pasteurization.

In contrast, claims 10, 12, 13 and 15 are specifically directed to pasteurized crabmeat. It is well known that crabmeat has different physical characteristics, including texture and taste, than dried, broiled fish and presents different microbial management issues than dried, broiled fish. It is also well known that sterilization and pasteurization are two distinct processes, wherein sterilization yields a steril product and pasteurization yields a product in which not all bacteria and spores have been destroyed, thereby requiring strict monitoring and controls. Therefore, a person skilled in the art would not look to a reference directed to sterilizing dried, broiled fish when seeking to package pasteurized crabmeat. Nor would a person skilled in the art believe that a sterilization process for dried, broiled fish can be successfully used for preparing pasteurized crabmeat packaged in a flexible pouch.

Nonetheless, the Examiner argues that it would have been obvious “to modify Doerter in view of Sugisawa and include 18% of air (by volume) to the packaged shellfish (crabmeat) product, to enhance the effect of the heat treatment (pasteurization or sterilization) and also to prevent deterioration of crabmeat due to breaking.” (Final Office action, p. 5, ll. 17-21.) This argument must fail for several reasons. First, as discussed above, the Sugisawa et al. reference teaches away from packaging pasteurized crabmeat. Second, the Examiner’s argument that the Sugisawa et al. reference teaches enhancing the effect of “heat treatment (pasteurization or sterilization)” is factually incorrect. The Sugisawa et al. reference makes no mention of pasteurization. Rather, as discussed above, the Sugisawa et al. reference teaches that the vacuum packaging process improves the sterilization effect and prevents the flow of drips and breaking of the fish meat after sterilization. Finally, the Doerter reference cannot be modified as proposed by the Examiner without significantly altering the principle of operation of the Doerter reference. Specifically, the Doerter reference teaches “effectively [forcing] any air from the container,

leaving only shellfish and the carrageenan mixture.” (Doerter, col. 3, ll. 8-10.) Therefore, modifying the Doerter reference as proposed by the Examiner to include “18% of air (by volume)” is in direct conflict with Doerter’s teaching to remove all air from the container and leaving only the mixture of carrageenan and water.

To establish a prima facie case of obviousness based upon a combination of references, the Examiner must establish (1) a reason for combining the references, (2) a reasonable expectation for success and (3) that all claim limitations are taught by the combination of references. (MPEP § 2143.) It is submitted that the Examiner has failed to satisfy all three criteria of a proper prima facie case of obviousness.

First, neither the Doerter reference, the Peterson et al. reference, the Byrd reference, the Air Liquide reference nor the Sugisawa et al. reference teaches a packaged crabmeat product having an ambient air to crabmeat ratio within a flexible pouch of about 13 to 20 percent by volume, as required by claims 10, 12, 13 and 15. The Examiner has conceded this fact in connection with the Doerter, Peterson et al., Byrd and Air Liquide references. Furthermore, for the reasons expressed in detail above, the Sugisawa et al. reference also fails to teach an ambient air to crabmeat ratio within a range of about 13 to 20 percent by volume.

Second, the Examiner has failed to properly establish reasons for combining the Doerter, Peterson et al., Byrd, Air Liquide and Sugisawa et al. references to arrive at the packaged crabmeat product of claims 10, 12, 13 and 15. Specifically, for the reasons expressed in detail above, the Doerter, Byrd, Air Liquide and Sugisawa et al. references teach away from the claimed packaged crabmeat product and, therefore, cannot provide the requisite suggestion or motivation. *See Ormco Corp. v. Align Technologies, Inc.*, 463 F.3d 1299, 1308 (Fed. Cir. 2005) (“a reference that ‘teaches away’ from a given combination may negate a motivation to modify the prior art to meet the claimed invention”). Furthermore, the Peterson et al. reference merely concludes that it is advantageous to pasteurize crabmeat packaged in flexible pouches, but makes no mention of an ambient air to crabmeat ratio of 13 to 20 percent by volume.

Finally, the Examiner’s proposed combination of the Doerter, Peterson et al., Byrd, Air Liquide and Sugisawa et al. references lacks a reasonable expectation that the combination will successfully arrive at the packaged crabmeat product of claims 10, 12, 13 and 15. Specifically, because the Doerter, Byrd, Air Liquide and Sugisawa et al. references teach away from the



claimed packaged crabmeat product, they cannot provide the requisite reasonable expectation of success. Indeed, if they suggest anything, they suggest the combination would not be successful.

Furthermore, the Examiner's proposal to modify the Doerter reference in view of the Sugisawa et al. reference (final Office action, p. 5, ll. 17-21.) exemplifies the lack of a reasonable expectation of success. Specifically, as discussed above, modifying the Doerter reference, which teaches "effectively [forcing] any air from the container, leaving only shellfish and the carrageenan mixture," in view of the Sugisawa et al. reference, which teaches vacuum packaging dried, broiled fish with 15 percent air and then sterilizing, would change the principle of operation of the Doerter reference – a change from removing all air to leaving 15 percent air. Such a fundamental change in the principle of operation of a reference cannot support a claim of reasonable expectation of success and, indeed, suggests that such a modification may result in failure.

Thus, the Examiner has failed to establish a proper *prima facie* case of obviousness in connection with claims 10, 12, 13 and 15.

Assuming, *arguendo*, that the Examiner established a *prima facie* case of obviousness, the packaged crabmeat product of claims 10, 12, 13 and 15 provides unexpected benefits that rebut obviousness in this case. *See Kao Corp. v. Unilever U.S., Inc.*, 441 F.3d 963, 970 (Fed. Cir. 2006) (a *prima facie* case of obviousness can be rebutted by a showing of unexpected results). Specifically, as discussed in the specification at ¶¶ 13-14, the claimed ambient air to crabmeat ratio of about 13 to 20 percent by volume (1) reduces aerobic bacterial growth without losing the ability of spoilage bacteria to reproduce and warn consumers of dangerous temperature abuse, (2) creates a sufficient aerobic environment for slowing down the reproduction of dangerous anaerobic bacteria and (3) reduces the risk that the packaging will fail (e.g., rupture) during the pasteurization process. None of these advantages are discussed or even contemplated by the Doerter, Peterson et al., Byrd, Air Liquide and Sugisawa et al. references.

Accordingly, it is submitted that the rejections of claims 10, 12, 13 and 15 are improper and should be reversed on appeal.

2. Claims 3-5, 7 and 18

Claims 3-5, 7 and 18 are directed to a method for packaging crabmeat wherein a volume of crabmeat is placed into a flexible pouch and the amount of ambient air in the flexible pouch is

controlled to obtain an ambient air to crabmeat ratio within the flexible pouch of about 13 to 20 percent by volume such that anaerobic bacterial growth is prevented. The packed pouch is then sealed and pasteurized.

For the reasons expressed above in connection with claims 10, 12, 13 and 15, it is submitted that the Examiner's proposed combination of the Doerter, Peterson et al., Byrd, Air Liquide and Sugisawa et al. references fails to establish a prima facie case of obviousness in connection with claims 3-5, 7 and 18. It is further submitted that the unexpected advantages of the method of claims 3-5, 7 and 18 rebut the Examiner's assertion of obviousness.

Furthermore, claims 3-5, 7 and 18 are considered to be separately patentable because the Doerter, Peterson et al., Byrd, Air Liquide and Sugisawa et al. references fail to disclosed a method for packaging crabmeat including the affirmative step of controlling a volume of ambient air within a flexible pouch to obtain an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Therefore, it is respectfully submitted that the Examiner has failed to establish a prima facie case of obviousness in connection with claims 3-5, 7 and 18.

**B. CLAIMS 3-5, 7, 10, 12, 13, 15 AND 18 ARE NOT OBVIOUS OVER THE COMBINATION OF THE UHEYAMA ET AL. REFERENCE, THE PETERSON ET AL. REFERENCE, THE AIR LIQUIDE REFERENCE AND THE SUGISAWA ET AL. REFERENCE**

**1. Claims 10, 12, 13 and 15**

It is submitted that the Examiner's proposed combination of the Ueyama et al., Peterson et al., Air Liquide and Sugisawa et al. references fails to establish a prima facie case of obviousness in connection with claims 10, 12, 13 and 15. It is further submitted that the unexpected advantages of the packaged crabmeat product of claims 10, 12, 13 and 15 rebut the Examiner's assertion of obviousness.

The Peterson et al., Air Liquide and Sugisawa et al. references are discussed in detail above.

The Ueyama et al. reference discloses a heat-shrinkable multilayer film for packaging, among other things, foods having projections (e.g., crabs), fish meat and other marine products. (P. 5, ¶ 66.) However, as conceded by the Examiner, the Ueyama et al. reference does not disclose pasteurization (final Office action, p. 7, l. 5), prevention of anaerobic bacterial growth (final Office action, p. 7, ll. 23-24) or an ambient air to crabmeat ratio of about 13 to 20 percent

by volume (final Office action, p. 8, ll. 4-5).

Furthermore, it is submitted that the Ueyama et al. reference teaches away from a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Specifically, the Ueyama et al. reference teaches a multi-layered film that shrinks when subjected to heat (e.g., hot water at 80 to 90 °C). (P. 3, ¶ 33.) Therefore, if the teachings of the Ueyama et al. reference were applied to the packaged crabmeat product of claims 10, 12, 13 and 15, the product would shrink during the pasteurization process, thereby rendering it difficult, if not impossible, to achieve the desired ambient air to crabmeat ratio of about 13 to 20 percent by volume.

Thus, it is submitted that the Ueyama et al. reference fails to teach a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. It is further submitted that the Ueyama et al. reference teaches away from the claimed packaged crabmeat product. As such, it is submitted that the Ueyama et al. reference fails to remedy the shortcomings of the Peterson et al., Air Liquide and Sugisawa et al. references discussed in detail above.

Accordingly, for the reasons expressed above, the rejections of claims 10, 12, 13 and 15 based upon the combination of the Ueyama et al., Peterson et al., Air Liquide and Sugisawa et al. references are improper and should be reversed on appeal.

2. Claims 3-5, 7 and 18

For the reasons expressed above in connection with claims 10, 12, 13 and 13, it is submitted that the Examiner's proposed combination of the Ueyama et al., Peterson et al., Air Liquide and Sugisawa et al. references fails to establish a prima facie case of obviousness in connection with claims 3-5, 7 and 18. It is further submitted that the unexpected advantages of the method of claims 3-5, 7 and 18 rebut the Examiner's assertion of obviousness.

Furthermore, claims 3-5, 7 and 18 are considered to be separately patentable because the Ueyama et al., Peterson et al., Air Liquide and Sugisawa et al. references fail to disclosed a method for packaging crabmeat including the affirmative step of controlling a volume of ambient air within a flexible pouch to obtain an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Therefore, it is respectfully submitted that the Examiner has failed to establish a prima facie case of obviousness in connection with claims 3-5, 7 and 18.

**C. CLAIMS 3-5, 7, 10, 12, 13, 15 AND 18 ARE NOT OBVIOUS OVER THE COMBINATION OF THE LETT ET AL. REFERENCE, THE PETERSON ET AL. REFERENCE, THE AIR LIQUIDE REFERENCE, THE DOERTER REFERENCE AND THE SUGISAWA ET AL. REFERENCE**

1. Claims 10, 12, 13 and 15

It is submitted that the Examiner's proposed combination of the Lett et al., Peterson et al., Air Liquide, Doerter and Sugisawa et al. references fails to establish a prima facie case of obviousness in connection with claims 10, 12, 13 and 15. It is further submitted that the unexpected advantages of the packaged crabmeat product of claims 10, 12, 13 and 15 rebut the Examiner's assertion of obviousness.

The Peterson et al., Air Liquide, Doerter and Sugisawa et al. references are discussed in detail above.

The Lett et al. reference discloses a method for packaging crab including the steps of: (1) optionally wrapping the crab in parchment, (2) placing the crab in a pouch of plastics material, (3) adding brine to the pouch, (4) vacuum sealing and (5) pasteurizing the sealed pouch. (Lett et al., p. 11.) However, as conceded by the Examiner, the Lett et al. reference does not disclose prevention of anaerobic bacterial growth (final Office action, p. 10, ll. 24-25) or an ambient air to crabmeat ratio of about 13 to 20 percent by volume (final Office action, p. 11, ll. 27-30).

Furthermore, it is submitted that the Lett et al. reference teaches away from a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Specifically, the Lett et al. reference teaches packing crab (whole crab) in a plastic pouch that has been filled with brine and has been vacuum sealed to remove air. Therefore, the Lett et al. reference expressly teaches the removal of air from the package, thereby suggesting that air is detrimental to the final product.

Thus, it is submitted that the Lett et al. reference fails to teach a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. It is further submitted that the Lett et al. reference teaches away from the claimed packaged crabmeat product. As such, it is submitted that the Lett et al. reference fails to remedy the shortcomings of the Peterson et al., Air Liquide, Doerter and Sugisawa et al. references discussed in detail above.

Accordingly, for the reasons expressed above, the rejections of claims 10, 12, 13 and 15 based upon the combination of the Lett et al., Peterson et al., Air Liquide, Doerter and Sugisawa

et al. references are improper and should be reversed on appeal.

2. Claims 3-5, 7 and 18

For the reasons expressed above in connection with claims 10, 12, 13 and 13, it is submitted that the Examiner's proposed combination of the Lett et al., Peterson et al., Air Liquide, Doerter and Sugisawa et al. references fails to establish a prima facie case of obviousness in connection with claims 3-5, 7 and 18. It is further submitted that the unexpected advantages of the method of claims 3-5, 7 and 18 rebut the Examiner's assertion of obviousness.

Furthermore, claims 3-5, 7 and 18 are considered to be separately patentable because the Lett et al., Peterson et al., Air Liquide, Doerter and Sugisawa et al. references fail to disclosed a method for packaging crabmeat including the affirmative step of controlling a volume of ambient air within a flexible pouch to obtain an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Therefore, it is respectfully submitted that the Examiner has failed to establish a prima facie case of obviousness in connection with claims 3-5, 7 and 18.

**D. CLAIMS 3-5, 7, 10, 12, 13, 15 AND 18 ARE NOT OBVIOUS OVER THE COMBINATION OF THE WALKER ET AL. REFERENCE, THE UHEYAMA ET AL. REFERENCE AND THE SUGISAWA ET AL. REFERENCE**

1. Claims 10, 12, 13 and 15

It is submitted that the Examiner's proposed combination of the Walker et al., Ueyama et al. and Sugisawa et al. references fails to establish a prima facie case of obviousness in connection with claims 10, 12, 13 and 15. It is further submitted that the unexpected advantages of the packaged crabmeat product of claims 10, 12, 13 and 15 rebut the Examiner's assertion of obviousness.

The Ueyama et al. and Sugisawa et al. references are discussed in detail above.

The Walker et al. reference discloses a method for preserving shellfish, such as crab, by (1) partially cooking the crab to remove the meat, (2) dipping the cooked meat into a chlorine solution, (3) impregnating the cooked meat with an aqueous solution of an inorganic chloride (e.g., sodium chloride), an antibacterial agent (e.g., sodium nitrate), and an organic acid (e.g., citric acid), (4) placing the impregnated meat into a container, (5) pasteurizing the impregnated meat and (6) sealing the container. As conceded by the Examiner, the Walker et al. reference does not disclose an ambient air to crabmeat ratio of about 13 to 20 percent by volume (non-final Office action, p. 9, ll. 23-24).

Furthermore, it is submitted that the Walker et al. reference teaches away from a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Specifically, the Walker et al. reference teaches impregnating shellfish meat with an aqueous solution having a bacteriostatic effect (col. 3, ll. 39-41), thereby obviating the need for an ambient air to crabmeat ratio of 13 to 20 percent by volume, as required by claims 10, 12, 13 and 15.

Thus, it is submitted that the Walker et al. reference fails to teach a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume. It is further submitted that the Walker et al. reference teaches away from the claimed packaged crabmeat product. As such, it is submitted that the Walker et al. reference fails to remedy the shortcomings of the Ueyama et al. and Sugisawa et al. references discussed in detail above.

Accordingly, for the reasons expressed above, the rejections of claims 10, 12, 13 and 15 based upon the combination of the Walker et al., Ueyama et al. and Sugisawa et al. references are improper and should be reversed on appeal.

2. Claims 3-5, 7 and 18

For the reasons expressed above in connection with claims 10, 12, 13 and 13, it is submitted that the Examiner's proposed combination of the Walker et al., Ueyama et al. and Sugisawa et al. references fails to establish a prima facie case of obviousness in connection with claims 3-5, 7 and 18. It is further submitted that the unexpected advantages of the method of claims 3-5, 7 and 18 rebut the Examiner's assertion of obviousness.

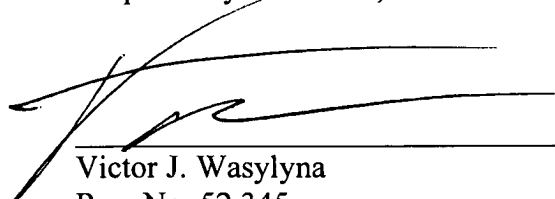
Furthermore, claims 3-5, 7 and 18 are considered to be separately patentable because the Walker et al., Ueyama et al. and Sugisawa et al. references fail to disclosed a method for packaging crabmeat including the affirmative step of controlling a volume of ambient air within a flexible pouch to obtain an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Therefore, it is respectfully submitted that the Examiner has failed to establish a prima facie case of obviousness in connection with claims 3-5, 7 and 18.

CONCLUSION:

For the foregoing reasons, the Examiner has failed to establish a prima facie case of obviousness with respect to claims 3-5, 7, 10, 12, 13, 15 and 18. As such the rejections of claims 3-5, 7, 10, 12, 13, 15 and 18 under 35 U.S.C. § 103(a) should be reversed.

Prompt and favorable action is respectfully requested.

Respectfully submitted,



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**CLAIMS APPENDIX**

3. The method of claim 18 wherein said flexible pouch is comprised of a multi-layered film.
4. The method of claim 3 wherein said multi-layered film comprises:
  - at least one layer of polyethylene terephthalate;
  - at least one layer of nylon;
  - at least one layer of aluminum; and
  - at least one layer of cast polypropylene.
5. The method of claim 18 wherein said sealing step includes the use of a partial vacuum.
7. The method of claim 18 wherein said air to crabmeat ratio is about 20% by volume.
10. A packaged crabmeat product comprising:
  - a flexible pouch;
  - a volume of crabmeat placed into said flexible pouch; and
  - a volume of ambient air within said flexible pouch, said volume of ambient air providing an ambient air to crabmeat ratio within said flexible pouch of about 13-20% by volume such that anaerobic bacterial growth is prevented, wherein said flexible pouch is sealed and pasteurized.
12. The packaged crabmeat product of claim 10 wherein said flexible pouch is comprised of a multi-layered film.
13. The packaged crabmeat product of claim 12 wherein said multi-layered film comprises:
  - at least one layer of polyethylene terephthalate;
  - at least one layer of nylon;
  - at least one layer of aluminum; and
  - at least one layer of cast polypropylene.
15. The packaged crabmeat product of claim 10 wherein said air to crabmeat ratio is about 20%



by volume.

18. A method for packaging crabmeat comprising the steps of:

providing a flexible pouch;

placing a volume of crabmeat into said flexible pouch;

after said crabmeat has been placed into said flexible pouch, controlling a volume of ambient air in said flexible pouch to obtain an ambient air to crabmeat ratio within said flexible pouch of about 13-20% by volume such that anaerobic bacterial growth within said flexible pouch is prevented;

sealing said flexible pouch; and

after said sealing step, pasteurizing said flexible pouch.

**EVIDENCE APPENDIX**

(None.)

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**RELATED PROCEEDINGS APPENDIX**

(None.)